Phytologia (May 1995) 78(5):402-403.

## PALHINHAEA CERNUA (L.) VASCONCELLOS & FRANCO (LYCOPODIACEAE) NEW TO TEXAS

## B.R. MacRoberts & M.H. MacRoberts

Bog Research, 740 Columbia, Shreveport, Louisiana 71104 U.S.A.

# ABSTRACT

Palhinhaea cernua previously unreported in Texas has been found on the Angelina National Forest in Jasper County.

KEY WORDS: Palhinhaea cernua, Texas, Lycopodiaceae

Palhinhaea cernua (L.) Vasconcellos & Franco {SY = Lycopodiella cernua (L.) Pichi Sermolli, Lycopodium cernuum L.}, although probably the world's most common club-moss (Wagner & Beitel 1993) with a range that includes both the Old and New World tropics and subtropics (McVaugh 1992), is rare in the Gulf Coastal Plain and especially rare in the West Gulf Coastal Plain. It has not been reported from Texas (Thieret 1980; Lellinger 1985; MacRoberts & MacRoberts 1993; Wagrer & Beitel 1993; Bill Carr, Texas Natural Heritage Program, pers. comm.; Stanley D. Jones, Botanical Research Center [BRCH], pers. comm.).

On August 3, 1995, while conducting a survey for rare plants on the Angelina National Forest, we found two specimens of *Palhinhaea cernua* in Texas. Both had erect branching shrub-like stems with developing strobili at the branch ends. They were growing within a meter of each other in a hillside pitcher plant bog on we. but not inundated, sand in full sun. Associated species were *Sarracenia alata Wood*, *Aletris aurea* Walt., *Drosera capillaris* Poir., *Osmunda regalis* L., *Sphagnum* sp., *Rhynchospora oligantha* A. Gray, *Eriocaulon decangulare* L., *Lycopodiella appressa* (Chapm.) Cranfill, *Xyris* spp., and other typical bog species (Nixon & Ward 1986). This bog is located about 21 km SE of Zavalla on the Angelina National Forest, Jasper County. It is about 125 km SW of the species' nearest known location in Natchitoches' Parish, Louisiana (Thomas *et. al* 1978), making Jasper County the westernmost station for the species.

Since we found only two stems, we did not collect but documented the species photographically (*MacRoberts & MacRoberts 2860* [ASTC], [VDB], [BRCH], [LSUS]) and by independent identification in the field by another botanist (Robert E. Evans).

MacRoberts & MacRoberts:

## ACKNOWLEDGMENTS

Rob Evans, Ecologist/Botanist, USDA Forest Service, National Forests and Grasslands in Texas, aided in all phases of this work. The plants were found while we were engaged in a Challenge Cost-Share Agreement with the National Forests and Grasslands in Texas. We would like to especially thank Bill Carr and Stanley Jones for information about the distribution of *Palhinhaea cernua* and for their comments on an earlier version of this note.

#### LITERATURE CITED

- Lellinger, D.B. 1985. A Field Manual of the Ferns & Fern-Allies of the United States and Canada. Smithsonian Institution Press, Washington, D.C.
- MacRoberts, B.R. & M.H. MacRoberts. 1993. Floristics of a bog in Vernon Parish, Louisiana, with comments on noteworthy bog plants in western Louisiana. Phytologia 75:247-258.
- McVaugh, Ř. 1992. Flora Novo-Galiciana: A Descriptive Account of the Vascular Plants of Western Mexico. Vol. 17: Gymnosperms and Pteridophytes. The University of Michigan Herbarium, Ann Arbor, Michigan.
- Nixon, E.S. & J.R. Ward. 1986. Floristic composition and management of east Texas pitcher plant bogs. In: D.L. Kulhavy & R.W. Conner (eds.). Wilderness and Natural Areas in the Eastern United States: A Management Challenge. Center for Applied Studies, School of Forestry, Stephen F. Austin State University, Nacogdoches, Texas. pp 283-287.
- Thieret, J.W. 1980. Louisiana Ferns and Fern Allies. Lafayette Natural History Museum, Lafayette, Louisiana.
- Thomas, R.D., W.C. Holmes, C.M. Allen, & G. Landry 1978. Lycopodium cernuum in Louisiana. American Fern Journal. 68:96.
- Wagner, W.H. & J.M. Beitel. 1993. Lycopodiaceae. In: Flora of North America Editorial Committee (eds.). Flora of North America, Vol. 2, eds. Oxford University Press, New York, New York. pp. 18-37.